



# UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/702,033

11/06/2003

Mladen Marko Kekez

MAC 494-4

7410

7590

03/14/2006

William A. Blake  
Jones, Tullar & Cooper, P.C.  
P.O. Box 2266 Eads Station  
Arlington, VA 22202

EXAMINER

PARRIES, DRU M

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/702,033

Applicant(s)

KEKEZ ET AL.

Examiner

Dru M. Parries

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-7 is/are allowed.
- 6) ☒ Claim(s) 1 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9-15-04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on October 28, 2003. It is noted, however, that applicant has not filed a certified copy of the 2,447,094 application as required by 35 U.S.C. 119(b).

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkawa (5,301,362), Thompson (Reg. Number H148), and Prior Art (Admission). Ohkawa teaches a system that generates and emits RF pulses. He teaches this being accomplished by an explosion via magnetic and explosive particles and inducing high power electrical pulse. He also teaches the system being used to power broadband spark transmitters or a narrow band transmitter of different power levels. He also teaches the idea of adding a capacitor to the system to increase the power of the electrical pulse (Abstract). Ohkawa fails to explicitly teach what type of device is initiating the explosion to produce a high power electrical pulse. Thompson teaches a magneto-cumulative generator that can produce strong electrical current pulses. He also teaches that upon detonation of the explosion the inner tube of the generator flares radially, forming a vortex wake, with a conical-shaped structure (Col. 2, lines 2-24). He also teaches that the explosive material could be any type of conventional explosive (Col. 1, lines 58-59). Admission teaches the benefits of using a magneto-cumulative generator. It would have been

Art Unit: 2836

obvious to one of ordinary skill in the art at the time of the invention to use a magneto-cumulative generator to power the transmitters in Ohkawa's invention because they have inherently low impedance and an energy density that is four to six orders of magnitude higher than traditional high voltage capacitors and smaller in size. It also would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a capacitor on the power source (MCG) to increase the power of the electrical pulse. It also would have been obvious to one of ordinary skill in the art at the time of the invention to place the capacitor between a turn of the helix and an end cap of the MCG, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. It also would have been obvious to one of ordinary skill in the art at the time of the invention to have the MCG containing 0.5-2 kg or 10-60 g and generating a RF pulse of 10-40kJ, since it has been held that where the general conditions of a claim are disclosed in the prior art (Ohkawa), discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkawa (5,301,362), Thompson (Reg. Number H148), and Prior Art (Admission) as applied to claim 1 above, and further in view of Brumfield (3,317,763). Ohkawa, Thompson and Admission teach a pulse-generating device as described above. Ohkawa fails to teach adding a low-ionization material. Brumfield teaches adding a thin layer (slab) of low-ionization material in the explosion chamber (Col. 2, lines 36-42). It would have been obvious to one of ordinary skill in the art at the time of the invention to add a low-ionization material into the explosion chamber in the generator because it would increase the electrical conductivity of the explosion.

***Allowable Subject Matter***

5. Claims 2-7 are allowed.

Art Unit: 2836

6. The following is an examiner's statement of reasons for allowance: the references of record, either alone, or in combination, do not teach or suggest at least the limitations of: a helical Magneto-Cumulative Generator emitting RF pulses out of both ends of the device, upon flight of the generator, which is recited in claim 2. Claims 3-7 are dependent upon claim 2, therefore they are allowed as well.

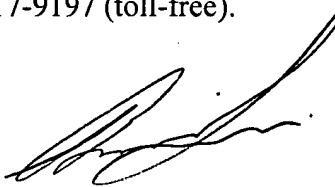
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on Monday -Thursday from 8:00am to 5:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

3-4-2006



**BRIAN SIRCUS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**